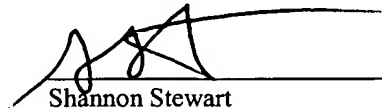PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Shannon Stewart

Applicant	:	Kim, Myoung-Kwan	Confirmation No. 7507
Application No.	:	10/840,169	
Filed	:	May 6, 2004	
Title	:	ADDRESS DATA PROCESSING DEVICE AND METHOD FOR PLASMA DISPLAY PANEL, AND RECORDING MEDIUM FOR STORING THE METHOD	
Grp./Div.	:	2629	
Examiner	:	Leonid Shapiro	
Docket No.	:	51922/P849	

PRE -APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Post Office Box 7068
Pasadena, CA 91109-7068
July 3, 2008

Commissioner:

The Applicants request that the Examiner's final rejection of Claims 1-2, 4-14, 16-23, and 29 in the Office Action dated January 4, 2008 and the Applicant's Amendment After Final dated March 4, 2008 be reviewed. The Applicants respectfully submit that the rejections of record appear to include factual deficiencies.

In addition, based on a reading of the Advisor Action dated May 27, 2008, the Applicants assume that the amendments to Claims 13 and 16 have been entered. That is, Claim 13 has been amended to include the recitations of "generating subfield data corresponding to the selected video data" originally recited in previously canceled Claim 15, and Claim 16 has been amended to now depend from Claim 13 instead of cancelled Claim 15. As such, no new matter has been added. Further, no new search would be needed because the limitation added to the independent Claim 13 was already in the claim set.

-1-

Before addressing the merits of the rejection based on prior art, a brief description of the present application is provided. The present application is directed toward an address data processor for a plasma display panel (PDP) and a method for process address data in a PDP. With reference to FIG. 4 of the present application and according to an embodiment of the present invention, the address data processor includes FIFO memories 101, 103, and 105 for respectively receiving and outputting red (R), green (G) and blue (B) components of RGB video data, an RGB mixer 110 for receiving and mixing the RGB video data (i.e., the R, G and B componets of the RGB video data), and selecting the RGB videodata as a specific combination of the RGB video data; subfield data generators 121, 123 for receiving the selected RGB video data in the specficic combination, and generating corresponding subfield data; frame memories A and B 161, 163 for storing the subfield data using a rising edge and a falling edge of a reference clock signal, and outputting the stored subfield data using the rising edge and the falling edge of the reference clock signal; and a subfield data arranger 170 for receiving the subfield data output by the frame memory 161,163 , and arranging the received subfield data as address data for each subfield.

FIG.4
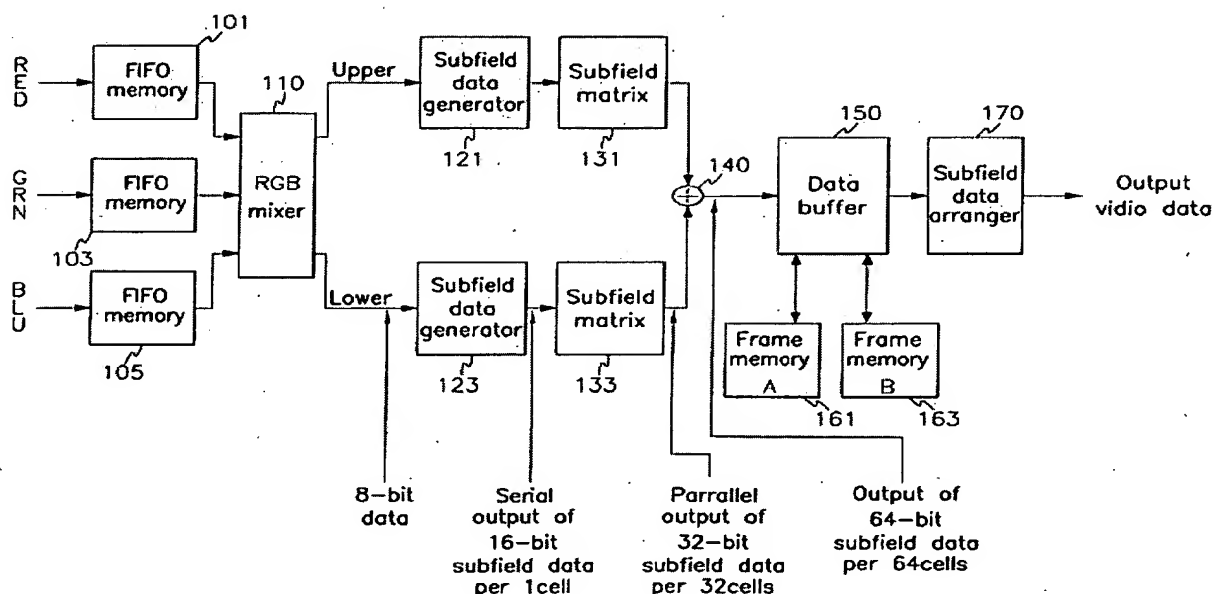
Specifically, as an example, page 12, line 19 to page 13, line 20 of the present application states:

> The RGB <u>mixer 110</u> receives the RGB video data from the FIFO memories 101, 103, and 105, <u>selects two sets of them according to an RGB mixing algorithm,</u> and outputs them as 8-bit <u>video data</u> to the subfield data generators 121 and 123, respectively.
>
> * * *
>
> By using the above-described RGB mixing algorithm, <u>three</u> RGB component video data outputs are processed by the <u>two</u> subfield data generators 121 and 123 (emphasis added).

The subfield data generators 121 and 123 respectively receive the <u>two sets of video data</u> output from the RGB mixer 110, that is, the upper <u>video data</u> and the lower video data, generate <u>subfield data</u> for representing gray corresponding to the respective video data, and output the subfield data.

The Office Action has rejected Claims 1-2, 4, 13-14, 16, 24-26, and 29 under 35 U.S.C. §103(a) as being unpatentable over Kim (6,191,762) and Jeddeloh (6,157,398) and further in view of Nagai (6,608,610). Claims 5 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kim, Jeddeloh, and Nagai, and further in view of Sha (7,142,251). The Applicants respectfully traverse as follows:

In the present application, Claim 1 recites, among other things, the limitations of "an **RGB mixer** for receiving RGB video data, and **selecting data as a specific combination** of the RGB **video data**"; and "a subfield data generator **for receiving the selected data**, and generating corresponding **subfield data**."

As such, the combination of Kim, Jeddeloh, and Nagai do not disclose or suggest the recitations of Claim 1. That is, Nagai does not disclose or suggest the subject matter as recited above. Instead, Nagai teaches a subfield driving method, which is as follows:

> The video signal processing portion 15 mainly performs signal processing inherent in the PDP, such as sorting of image data. For instance, upon receipt of respective 8-bit signals for RGB in parallel, the video signal processing portion 15 performs processing such as sorting of the signals in the order of gradation bits so as to conform to the subfield gradation technique.

(Col. 9, lines 39-47). As such, Nagai does not disclose or suggest "an **RGB mixer** for receiving RGB video data, and **selecting data as a specific combination** of the RGB video data" as recited in Claim 1 (emphasis added).

That is, Nagai appears to disclose noting more than a processing portion 15 for generating subfield data from RGB video data by sorting the video "signals in the order of gradation bits so as to conform to the subfield gradation technique." To put it another way, Nagai appears to disclose noting more than a subfield data generator that receive the RGB video data and process these RGB video data "such as sorting of the signals in the order of gradation bits so as to conform to the subfield gradation technique" to generate "subfield data."[1]

As such, the processing portion 15 of Nagai is nothing more than a "subfield data generator" for receiving the RGB video data to generate (or convert) the RGB video data into "subfield data for representing corresponding grays" (see page 3, lines 12-15, of the present application). Accordingly, Nagai **does not** disclose or suggest "an **RGB mixer**" that is coupled in front of the "subfield data generator" for mixing and selecting RGB video data as a specific combination of RGB video data (that still remain as RGB video data). That is, Nagai (whether alone or in combination with the other cited references) does not disclose or suggest "an **RGB mixer** for receiving RGB video data, and **selecting data as a specific combination** of the RGB video data" as recited in Claim 1, which also further recites "a subfield data generator **for receiving the selected data**, and generating corresponding subfield data" (emphasis added).

Similarly, Nagai does not disclose or suggest in amended Claim 13 of a method for processing address data in a plasma display panel (PDP) comprising "receiving RGB video data; **selecting video data as a specific combination** from the RGB video data"; and "generating

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[1] As discussed in page 2, lines 12-15 of the present application, "[t]o display RGB video data as PDP address data, the **video data** need to be converted to **subfield data**. For example, for the case of representing the gray of red 149, the values converted into subfield data [by the subfield data generator] using twelve subfields are shown in Table 1" (emphasis added). In Table 1 of the present application, SF0 has the lowest gray level weight and SF11 has the highest gray level weight. "The subfield data generated for gray representation are arranged as address data for driving the PDP." See page 2, line 23-34 of the present application.

subfield data corresponding to **the selected video data**" (emphasis added). Accordingly, independent Claims 1 and 13 should now be allowed.

Claims 2 and 4-12 depend (directly or indirectly) from Claim 1, and Claims 14 and 16-23 depend (directly or indirectly) from Claim 13. As such, these dependent claims incorporate all the terms and limitations of their respective base claims (i.e., Claim 1 or Claim 13) in addition to other limitations, which together further patentable distinguish them over the references made of record. Also, Claims 6-12 and 18-23 are indicated as being allowable.

In addition, since Nagai does not disclose or suggest "an **RGB mixer** for receiving RGB video data, and **selecting data as a specific combination** of the RGB **video data**," Nagai certainly cannot disclose or suggest "an **RGB mixer** for receiving RGB video data, **selecting at least two sets of video data as a specific combination** of the RGB video data, and outputting the selected data" as are recited in Claim 29. Accordingly, Claim 29 should now be allowed for reasons similar to Claim 1, and for the additional reason that it recites "an **RGB mixer** for ... **selecting at least two sets** of video data as a specific combination of the RGB video data, and outputting the selected data [to "a subfield data generator" the receive the video data and convert them into subfield data]."

Accordingly, the Applicants submit that Claims 1, 2, 4-14, 16-23, and 29 are non-obvious over the cited references, and should be allowed.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By _____

Peter C. Hsueh
Reg. No. 45,574
626/795-9900

PCH/pch

SLS PAS801722.1-*-07/2/08 10:10 AM

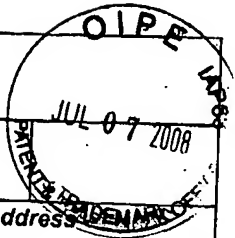| *Advisory Action* *Before the Filing of an Appeal Brief*	Application No. 10/840,169	Applicant(s) KIM ET AL.	
	Examiner Leonid Shapiro	Art Unit 2628	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED <u>10 March 2008</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.

   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ They raise the issue of new matter (see NOTE below);

   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: <u>1-2, 4-14, 16-23, 29</u>

   Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

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10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet</u>.

12. ☐ Note the attached Information *Disclosure* Statement(s). (PTO/SB/08) Paper No(s). _____.

13. ☐ Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because: Continuation of 1. does NOT place the application in condition for allowance because: On page 8, 1st paragraph of Remark, Applicant's stated that Nagai does not disclose or suggest "an RGB mixer for receiving RGB video data, and selecting data as a specificcombination of the RGB video data" as recited in independent Claims. However, Nagai teaches an RGB mixer for receiving the RGB video data, selecting data as a specific combination of the RGB video data, and outputting the selected data to the subfield data generator (fig.1A, items 14-15, col. 9, lines 36-47). Notice, that absent clearly definition in the claims, any combination of the RGB video data is specific, including sets of RGB video data.

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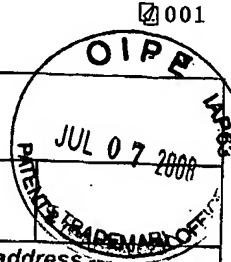| *Advisory Action* *Before the Filing of an Appeal Brief*	Application No. 10/840,169	Applicant(s) KIM ET AL.
	Examiner Leonid Shapiro	Art Unit 2629

--*The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

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U.S. Patent and Trademark Office

PTOL-303 (Rev. 08-06)   Advisory Action Before the Filing of an Appeal Brief   Part of Paper No. 20080702

Continuation Sheet (PTO-303)

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